NON-PUBLIC?: N
ACCESSION #: 8906130270
LICENSEE EVENT REPORT (LER)

FACILITY NAME: Plant Vogtle - Unit 2 PAGE: 1 of 3

DOCKET NUMBER: 05000425

TITLE: Loss Of Power To NI Channel Causes Reactor Trip During Surveillance Test
EVENT DATE: 05/12/89 LER #: 89-020-00 REPORT DATE: 06/09/89

OPERATING MODE: 1 POWER LEVEL: 078

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR SECTION
50.73(a)(2)(iv)

LICENSEE CONTACT FOR THIS LER:
NAME: R.M. Odom, Nuclear Safety and Compliance Manager TELEPHONE: 404-826-3201

COMPONENT FAILURE DESCRIPTION:
CAUSE: SYSTEM: COMPONENT: MANUFACTURER:
REPORTABLE TO NPRDS:

SUPPLEMENTAL REPORT EXPECTED: No

ABSTRACT:

On 5-12-89, while personnel were performing surveillance of nuclear instrument channel N44, a 2 out of 4 Hi Flux rate trip coincidence signal was received, causing an automatic reactor trip. Power range channel N43 experienced a momentary loss of power, which tripped the Rate Trip bistable on N43. The control room operator acknowledged the al am for the tripped bistable, but failed to notice that the wrong bistable had tripped for the work being performed. A step of the surveillance procedure, which was being performed for N44, requires the fuses to be pulled. This tripped the Rate Trip bistable for N44. The N43 and N44 bistables satisfied the 2 out of 4 Logic for a power range trip. The reactor trip breakers opened, tripping the reactor at 1429 CDT. All automatic systems functioned as designed. The control room operators brought the plant to stable conditions in Mode 3 (Hot Standby).

The causes of this event were the loss of power to channel N43 and the failure of control room operators to notice that the wrong bistable had tripped. Troubleshooting channel N43 did not reveal the cause for the loss of power. A copy of this LER will be placed in the Operation Required Reading book.

END OF ABSTRACT

A. REQUIREMENT FOR REPORT

This report is required per 10 CFR 50.73 (a)(2)(iv) because the event caused an unplanned automatic reactor trip.

B. UNIT STATUS AT TIME OF EVENT

At the time of the event, the unit was in Mode 1 (Power Operation) at 78% rated thermal power. Nuclear Instrument channel N44 was out of service for surveillance testing. The N43 axial flux deviation alan was logged as inoperable due to spurious indications of high delta flux, but this indication had been corrected by cleaning and reconnection of signal cables to the drawer. There was no other inoperable equipment that contributed to this event.

C. DESCRIPTION OF EVENT

On 5-12-89 surveillance was being performed on nuclear instrumentation channel N44. Unknown to the technician performing the surveillance, power range channel N43 experienced a momentary loss of power which tripped the Rate Trip bistable on N43. The control room operator acknowledged the alan for the tripped bistable (N43) but failed to notice that the wrong bistable had tripped for the work being performed (the N44 alarm was expected). A step in the surveillance procedure which was being performed for N44 requires the fuses to be pulled. This tripped the Rate Trip bistable for N44. The N43 and N44 bistables satisfied the 2 out of 4 logic for a power range reactor trip. The reactor trip breakers opened, tripping the reactor at 1429 CDT. As expected, following the reactor trip and subsequent Low Tave, a Feedwater Isolation (FWI) occurred causing all feedwater valves to close. Both motor driven and the turbine driven auxiliary feedwater pumps started on steam generator Low-Low levels. Operators followed Emergency Operating Procedures to respond to the trip and stabilize the plant.

D. CAUSE OF EVENT

1. Direct Cause

The direct cause of the trip was the 2 out of 4 rate trip coincidence.

2. Root Cause

The root causes of the event are:

a. The interruption of power to the N43 drawer during the performance of the surveillance on power range drawer N44. The loss of power could not be duplicated during troubleshooting and the exact cause is unknown.

b. The failure of the control room operator to notice that the wrong bistable (N43) had tripped.

E. ANALYSIS OF EVENT

The Unit was in Mode 1 when the reactor automatically tripped on a 2 out of 4 High Flux Rate trip signal. Automatic systems functioned as required. The control rods fully inserted into the core upon receipt of the trip signal. The plant was placed in a stable condition in Mode 3. No adverse safety consequences resulted from this event. Based on these considerations, it is concluded that this event had no adverse affect on plant safety or the health and safety of the public.

F. CORRECTIVE ACTIONS

1. Extensive troubleshooting of N43 was performed. The cause of the power loss could not be determined. Therefore, no corrective actions have been assigned at this time.

2. A copy of this LER will be placed in the Operations Required Reading book, to alert operators to the need to verify rate trip bistables have been reset prior to deenergizing the NIS drawers.

3. The operations requalification training program will be revised to increase emphasis on recognizing the cause of the alarm being acknowledged.

4. Nuclear instrument calibration procedures will be revised by 8-1-89 to require reactor operator signoff (in addition to instrument technician signoff presently required) prior to manually tripping bistables or removing instrument power.

G. ADDITIONAL INFORMATION

1. Failed Components

None

2. Similar Events

None

3. Energy Industry Identification System Code o Incore/Encore Monitoring System - IG

ATTACHMENT 1 TO 8906130270 PAGE 1 OF 1

ELV-00574
1220D

June 9, 1989

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D. C. 20555

PLANT VOGTLE - UNIT 2
NRC DOCKET 50-425
OPERATING LICENSE NPF-81
LICENSEE EVENT REPORT
LOSS OF POWER TO NI CHANNEL CAUSES
REACTOR TRIP DURING SURVEILLANCE TEST

Gentlemen:

In accordance with 10 CFR 50.73, Georgia Power Company hereby submits the enclosed report related to an event which occurred on May 12, 1989.

Sincerely,
W. G. Hairstion, III

TEW/PAH/gm

Enclosure: LER 50-425/1989-020

xc: Georgia Power Company
Mr. P. D. Rice
Mr. C. K. McCoy
Mr. G. Bockhold, Jr.
Mr. M. Sheibani
Mr. J. P. Kane
NORMS

U. S. Nuclear Regulatory Commission
Mr. S. D. Ebneter, Regional Administrator

Mr. J. B. Hopkins, Licensing Project Manager, NRR
Mr. J. F. Rogge, Senior Resident Inspector, Vogtle

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